

DATE: April 18, 2002

FILE REF: NR 445 Revisions

TO: File

FROM: Jeff Myers – AM/7

SUBJECT: Addition of Tetrafluoroethylene to Small Emitters List of Chemicals of Concern

One question that was evaluated earlier in the small emitters proposal was how a list of chemicals of concern could be generated so that sources that emit less than 3 tons of VOC or 5 tons of PM HAPs could reduce the universe of chemicals to look for, down to a smaller number.

An “expert group” developed a list of 78 chemicals as a result of personal knowledge of chemicals of concern from small emitters. However, for new chemicals, it was more difficult. Without knowing much about the chemicals and how they were used and the mix of Wisconsin industries that might emit HAPs, there is the possibility that some important HAPs were overlooked.

To evaluate the likelihood of the new chemicals to NR 445 being of concern from the small emitters viewpoint, I looked at David Liebl’s (UW- Extension Solid and Hazardous Waste Education Center) list of chemicals that had a large number of (material safety data sheets) MSDSs listed for them in his database. The NR 445 small emitter group had been using the number of MSDS sheets available, as a rough indication of which new chemicals in NR 445 might be used more than others.

I mainly looked for carcinogens that were not already listed in our previous proposal for small emitters, because the thresholds for these chemicals are typically lower than for non-carcinogens.

Of all the chemicals listed in the list that David provided, Tetrafluoroethylene seemed to have a large number of MSDS, and seemed like it was more likely than the rest of the carcinogens, to have the potential of small sources (i.e., small emitters) that could still be less than 3 tons for this chemical (it is a VOC), yet still present a high cancer risk. The proposed threshold for this chemical is 2.43 lbs/yr because there is no accepted cancer potency factor (unit risk factor) for it.

I would therefore recommend that Tetrafluorethylene be added to the list of chemicals that small sources must evaluate in the small emitters proposal.